## **DLOC Precursor IC 5.3: Practice Exercise #3**

Directions: Choose the lettered answer that best completes the question. There is only one correct answer for each question unless indicated otherwise.

- 1. The  $R_{max}$  is \_\_\_\_\_ related to the PRF and the  $V_{max}$  is \_\_\_\_\_ related to the PRF.
  - a. directly, inversely
  - b. directly, directly
  - c. inversely, inversely
  - d. inversely, directly
- 2. A WSR-88D radar is operating with a PRF of 1200 pulses per second and a target is **actually** located 70 nm from the radar. The  $R_{max}$  is \_\_\_\_\_ nm and the target \_\_\_\_\_ be range-folded to an apparent range.

$$R_{max} = \frac{c}{2PRF}$$

- a. 68, will
- b. 68, will not
- c. 125, will
- d. 125, will not
- 3. A WSR-88D radar is operating with a PRF of 800 pulses per second and a wavelength of 11.0 cm. The  $R_{max}$  is \_\_\_\_\_ nm and the  $V_{max}$  is \_\_\_\_\_ kts.

$$R_{max} = \frac{c}{2 \, PRF}$$
  $V_{max} = \frac{\lambda PRF}{4}$ 

- a. 101, 22
- b. 101, 43
- c. 188, 22
- d. 188, 43